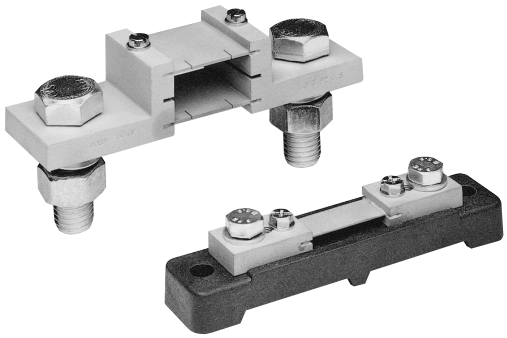
DIN 43703 Shunts

860 Series



Designed and manufactured to comply with the requirements of DIN43 703 this range of shunts provides an accurate D.C. millivolt signal, exactly proportional to the system current, to drive ammeter indicators, overload protection and control devices.

Features

- ***Ratings 1A up to 15000A***
- ***Shock and vibration tested***
- ***Low temperature coefficient***
- ***Long term stability***

Specification

The 860 series complies with DIN43 703 for dimensions and DIN43 780 for performance. When specified they conform to IEC51 (BS89).

Model N°:	Ratings
Model 860-92 60mV & 150mV	1, 1.5, 2.5, 4, 6, 10, 15, 20 & 25A
Model 861-92 60mV	30, 40, 50, 60 75, 80, 100 & 150A
Model 863-92 60mV	200, 250, 400, 500 & 600A
Model 864-92 60mV	750, 800, 1000, 1200, 1500, 2000 & 2500A
Model 868-92	4000, 5000, 6000, 8000, 10000 & 12000A
Accuracy class:	0.5 0.2 available on request
Outputs:	Standard outputs are 60mV and 150mV
Overload withstand:	1.2 x rated current continuously
5 second withstand:	1A-500A = 10 x rated current 501A-2000A = 5 x rated current 2001-15000A = 2 x rated current
Temperature Coefficient:	0.002% per °C overall
Ambient temperature:	Calibrated for 20°C the working range is -20°C to +60°C
Maximum load:	for maximum accuracy the load should not exceed 0.1% of the shunt current rating

Construction

Highest quality materials, rugged design and advanced manufacturing techniques are used throughout. The substantial solid brass end blocks have conservatively rated contact surface areas and fixing hole dimensions to DIN 43703: For maximum long term stability and strength, copper manganese resistance elements are both rivetted and soldered into slots in the end blocks.

Installation

For maximum heat dissipation, mount shunts in the horizontal plane, with the blade facing vertical. Utilise the full end block surface area. Ample ventilation should be provided. Busbars should be adequately rated, clean and level, with a thin coat of silicone grease applied to the contact surface area. Shunts are supplied with bolts, nuts and washers. These must be tightened fully. Ample ventilation should be provided.

Potential Leads

The length/resistance of leads should be allowed for up to 25A, end blocks are mounted on an insulated base which provides support and protection against damage to the resistance elements. An element cover is fitted on ratings up to 10A.

Warning

Shunts are uninsulated and protection against accidental contact may be necessary in order to comply with Health & Safety regulations.

Crompton INSTRUMENTS

Shunts

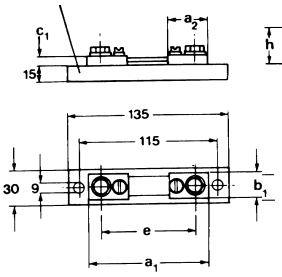
DIN 43703 Shunts

860 Series

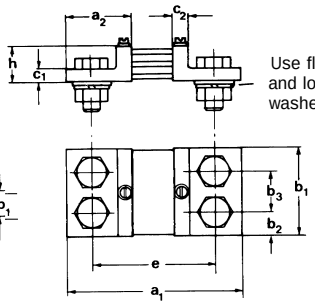
Dimensions comply with DIN 43 703

Form A1

(Form A2 is without insulated base)
Insulated base model 860

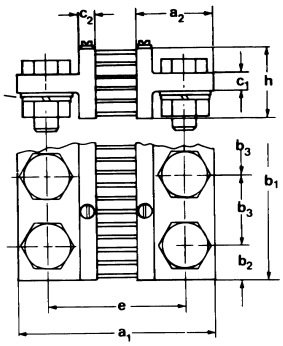


Form B



Use flat and lock washers

Form C



All voltage terminals have M5 x 8 screws and flat washers

60mV Models

Rated	Form A1 1A to 25A	Form A2 26A to 150A	Form B 151A to 250A	251A to 600A	601A to 1000A	1001A to 1500A	1501A to 2500A	Form C 2501A to 4000A	4001A to 6000A	6001A to 10000A	10001A to 12000A
Model N°	**860**	**861**	**863**	**863**	**864**	**864**	**864**	**867**	**868**	**869**	**869**
Dim											
a1	90	100	145	145	165	165	165	165	175	185	185
a2	28	33	55	55	65	65	65	65	70	75	75
b1	20	20	30	40	60	90	120	120	154	206	310
b2	-	-	15	20	30	21	30	30	25	25	25
b3	-	-	-	-	-	48	60	60	52	52	52
c1	8	8	10	10	10	10	10	15	25	30	30
c2	-	-	10	10	10	10	10	10	15	20	20
e	78	80	105	105	115	115	115	115	125	135	135
h	-	-	30	30	30	30	30	60	130	170	170

150mV Models

	Form A1		Form B					Form C			
Model N°	**860**	**862**	**865**	**865**	**866**	**867**	**867**	**868**	**868**	**869**	**869**
Dim											
a1	90	225	270	270	290	290	290	300	300	310	310
a2	28	33	55	55	65	65	65	70	70	75	75
b1	20	25	30	40	70	90	120	120	154	206	310
b2	-	-	15	20	35	21	30	30	25	25	25
b3	-	-	-	-	-	48	60	60	52	52	52
c1	8	8	10	10	10	15	15	25	25	30	30
c2	-	-	10	10	10	10	10	15	15	20	20
e	78	205	230	230	240	240	240	250	250	260	260
h	-	-	50	50	60	60	60	130	130	170	170
End block bolt holes	2 x 1	2 x 1	2 x 1	2 x 1	2 x 1	2 x 2	2 x 2	2 x 2	2 x 3	2 x 4	2 x 6
Bolt size											
60mV	M5 x 12	M8 x 15	M12 x 40	M16 x 45	M20 x 50	M16 x 45	M20 x 50	M20 x 60	M20 x 75	M20 x 85	M20 x 85
150mV	M5 x 12	M8 x 15	M12 x 40	M16 x 45	M20 x 50	M16 x 60	M20 x 60	M20 x 75	M20 x 75	M20 x 85	M20 x 85

Crompton INSTRUMENTS